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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/696,525

10/29/2003

Chieng-Chung Chen

500-004

6390

24002

7590

09/29/2005

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EXAMINER

PHAN, TRONG Q

ART UNIT

PAPER NUMBER

2827

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/696,525

Applicant(s)

CHEN, CHIENG-CHUNG

Examiner

TRONG PHAN

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is not understood what type of storage cell 212 in Figs. 2(A) and 2(B) really is. Is it whether a memory cell, a capacitor, a transistor or what else?

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-13 are, insofar as understood, rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Fig. 1 Prior Art, in view of Selcuk et al., 5,879,980, and Hiratsuka et al., 5,453,707.

What is not shown in Applicant's Fig. 1 Prior Art is the storage cell.

Selcuk et al., 5,879,980, discloses in Fig. 1 the teaching of capacitors 40 and 42

connected in series between storage nodes 26 and 28.

It would have been obvious under 35 USC 103(a) to one of ordinary skill in the art at the time of the invention was made to serially connect a capacitor 40/42 in Fig. 1 of Selcuk et al., 5,879,980, between the output of inverter I3 and MOS capacitor 12 in Applicant's Fig. 1 Prior Art for the purpose of enhancing the capacitance to increase the stability and noise immunity of the memory cell (see lines 4-9, column 5 of Selcuk et al., 5,879,980).

What is not shown in Applicant's Fig. 1 Prior Art, which is modified by Selcuk et al., 5,879,980, is the driving circuit consists of a PMOS transistor and a NMOS transistor generating a first clock signal according to a second clock signal and a third clock signal.

Hiratsuka et al., 5,453,707, discloses in Fig. 4 the teaching of using CMOS inverter 18 consists of PMOS transistor Mp1 and NMOS transistor Mn1 to generate first clock signal ϕ_1 according to second clock signal at the output of NAND gate 12 and third clock signal at the output of NOR gate 13 having different phases with each other as shown in Fig. 5.

It would have been obvious under 35 USC 103(a) to one of ordinary skill in the art at the time of the invention was made to utilize the CMOS inverter 18 in Figs. 4-5 of Hiratsuka et al., 5,453,707, for the inverter I3 in Applicant's Fig. 1 Prior Art, which is modified by Selcuk et al., 5,879,980, for the purpose of reducing power dissipation and preventing power source noise and ground noise (see lines 43-49, column 3 of Hiratsuka et al., 5,453,707).

Conclusion

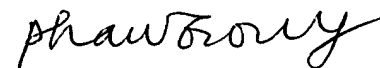
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Leung et al., 6,075,720, and Lien et al., 6,215,708.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRONG PHAN whose telephone number is (571) 272-1794. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HOAI HO can be reached on (571)272-1777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**TRONG PHAN
PRIMARY EXAMINER**



REPLACEMENT SHEET

Approved
TP
9/20/05

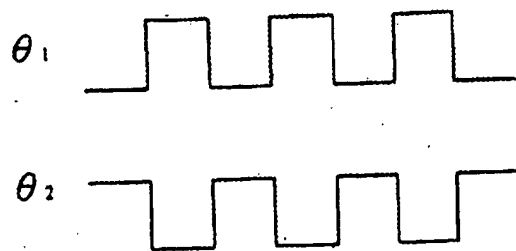
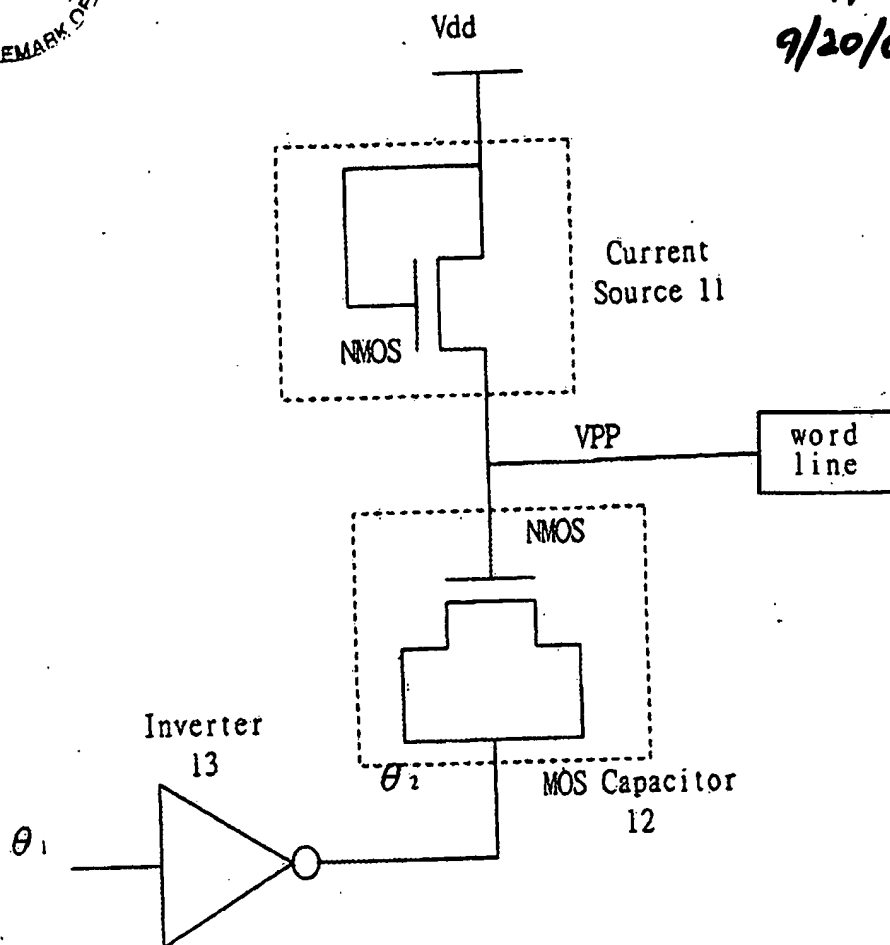


Figure 1 (Prior Art)

REPLACEMENT SHEET

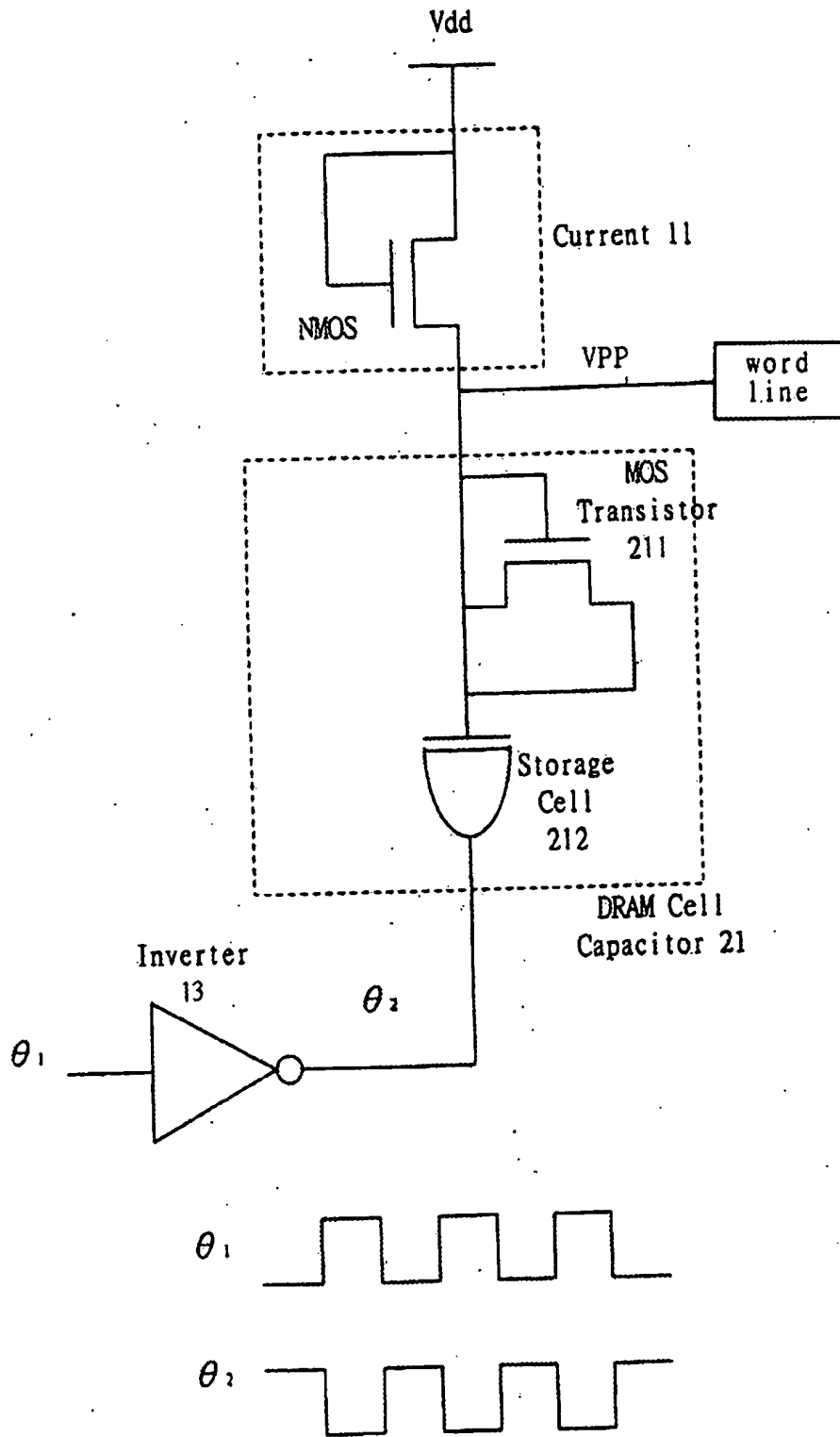


Figure 2(A)

REPLACEMENT SHEET

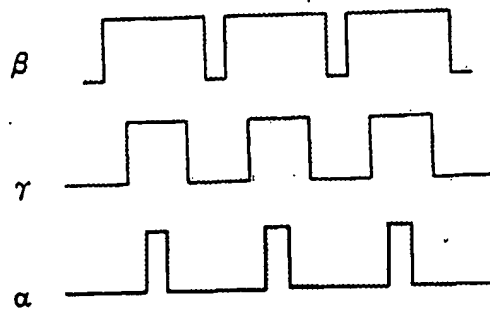
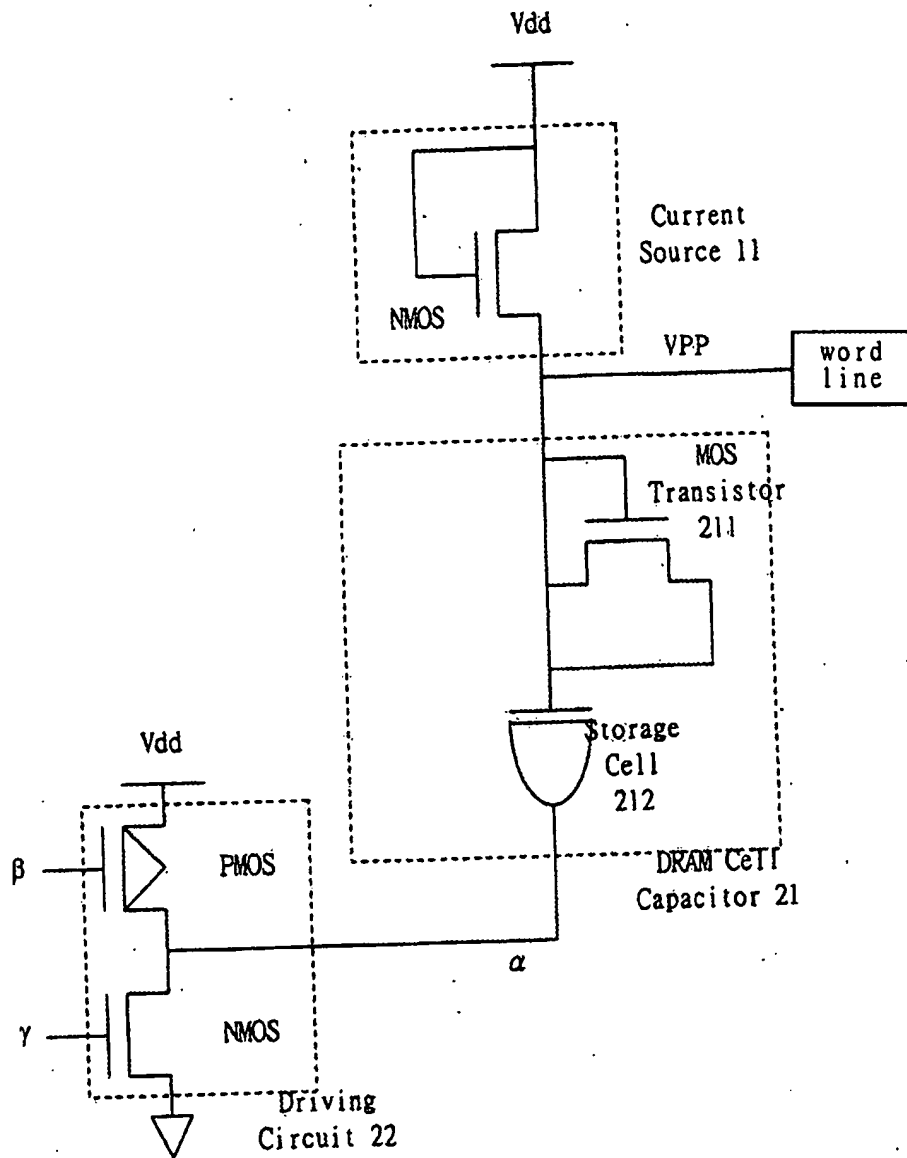


Figure 2 (B)